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ABSTRACT

A survey of hearing impaired children and youth in the United States for the school year 1969-70 was conducted. One dimensional summaries of selected characteristics for 32,285 students enrolled in participating special education programs for the hearing impaired were presented. Discussion of data highlights was followed by detailed tables that describe the following variables: number and percentage distribution of students enrolled in participating special educational programs for the hearing impaired by states, age, hearing threshold levels, age at onset of hearing loss, age hearing loss discovered, history of parental deafness before age six, hearing aid use, and age started formal education prior to age six; and among students enrolled in participating special educational programs for the hearing impaired, the number and rate per 1,000 students of additional handicapping conditions and probable causes of hearing loss. Appended are a description of the annual survey, basic data and preschool data forms used, and a list of programs participating in the annual survey. (CB)

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SERIES D  
NUMBER 5

**DATA FROM THE  
ANNUAL SURVEY OF HEARING  
IMPAIRED CHILDREN AND YOUTH**

**SUMMARY OF  
SELECTED CHARACTERISTICS  
OF HEARING IMPAIRED  
STUDENTS**

**UNITED STATES: 1969-70**

Additional handicapping conditions, age at onset of hearing loss, age loss discovered, probable cause of hearing loss, parental history of deafness, age started education prior to age six, hearing aid use, hearing threshold levels, age and sex distributions for approximately 35,000 students enrolled in participating special educational programs for the hearing impaired during the 1969 — 70 school year.

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OFFICE OF DEMOGRAPHIC STUDIES  
GALLAUDET COLLEGE

Washington, D.C.

June 1971

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## Acknowledgements

As the Annual Survey of Hearing Impaired Children and Youth enters its second year of data publications, we again want to thank the many people whose interest and energies have made and continue to make the Survey possible. We thank those at the participating schools and classes who prepared the survey data forms. We are hopeful we have made their efforts worthwhile and that they will find the information in the reports useful.

We also extend our appreciation to the National Advisory Committee. Their advice and assistance have been of great benefit to us in all areas of the program. The committee members are listed below.

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Brenda Rawlings  
Augustine Gentile  
Washington, D.C.  
June, 1971

# **Summary of Selected Characteristics of Hearing Impaired Students United States: 1969-70**

Brenda Rawlings

## **INTRODUCTION**

This report presents summary data on approximately 35,000 students enrolled in educational programs for the hearing impaired in the United States during the 1969-70 school year. A large body of data has been collected on these students and will be presented in a series of publications. The objective of this report is to provide as soon as possible a summary of the data which have been tabulated to date. Future reports will contain data showing significant relationships between variables included in this publication and also present other characteristics of the students.

The variables described in this report include: additional handicapping conditions, age at onset of hearing loss, age hearing loss discovered, probable cause of hearing loss, age at which the student started his education prior to age six, parental history of deafness and hearing aid use. Data on age, sex and audiometric findings (better ear averages) are considered basic demographic characteristics relevant to this population and will be included in all reports.

The information was collected by the Annual Survey of Hearing Impaired Children and Youth, a continuing program which began operations May 1968. The program is aimed at improving educational opportunities for the hearing impaired by collecting and disseminating useful information pertinent to this group. The Office of Demographic Studies at Gallaudet College conducts the Survey. The major

share of funding is provided by the Division of Research, Bureau of Education for the Handicapped, Office of Education, Department of Health, Education and Welfare. Further details about the Annual Survey program may be found in Appendix I.

## **SOURCES OF THE DATA**

For the 1969-70 school year, all educational programs for the hearing impaired known to the Survey Office were invited to participate in the Annual Survey. In all, 570 educational programs (reporting sources) were contacted and approximately 76 percent of these participated in the Survey for the 1969-70 school year. A total of 35,285 individual records were received. This constitutes 80 percent of the estimated student enrollment in the programs asked to participate. The programs that participated during the 1969-70 school year from which the data in this report were obtained are listed in Appendix IV.

## **DATA COLLECTION FORMS**

The basic survey forms used in gathering data for the 1969-70 school year appear in Appendices II and III. An abbreviated version of the Basic Data Form (ACHIC-2) was sent to those reporting sources which participated during the 1968-69 school year. These forms were used to determine if students

reported on the previous year were still in the same program. If so, data that were obtained the previous year were not requested again. All items included on the forms were selected on the basis of recommendations made by the National Advisory Committee.

The Basic Data Form for children over six (ACHIC-2) was used to collect data on students six years old and over who had never been reported to the Survey Office before. This included those students at schools which had not participated in the Survey and new students at schools which had participated the year before. See Appendix II.

For children under age six or who would become six years of age after December 31, 1969, ACHIC-4 was used. This form appears in Appendix III. It is similar to the Basic Data Form except for the sections on Educational Program and Educational History. This is due to the fact that types of preschool educational training vary widely and are distinct from the types of programs being attended by older children. Therefore, it was felt necessary to ask different questions regarding educational programs for preschool-age children and children six years of age and over.

#### QUALIFICATIONS AND LIMITATIONS OF THE DATA

In order to interpret and to use correctly the information presented in this report, it is important to take into consideration some general qualifications and limitations of these data.

As previously mentioned, records were obtained for 35,285 students. Based primarily on information available in *American Annals of the Deaf*<sup>1</sup>, the students for whom data were obtained represent about 80 percent of all students in schools and classes for the hearing impaired. However, with respect to itinerant special educational programs, data were obtained on about 4,000 students. It is estimated that this number represents only about one third of all such students.

For some of the questionnaire items the information requested was not available or unknown. For items where the information was not reported for a large percentage of the students, it is difficult to know the true distribution of the data. Table A shows the proportion of records for which information for particular items was not reported or was "usable.

<sup>1</sup> *Directory of Services for the Deaf in the United States: American Annals of the Deaf*, 1970 Edition, McCay Vernon, Editor.

TABLE A: Percentage of records for which data for selected items were not reported or were not usable: United States, 1969-70 school year

Item	Percent of Records for Which Data Were Not Reported or Were Not Usable
Age <sup>1</sup>	0.0
Sex <sup>1</sup>	0.0
Better ear average <sup>2</sup>	25.3
Hearing aid use	19.5
Age at onset of hearing loss	19.3
Age hearing loss discovered	52.6
Probable cause of hearing loss	54.2
Additional handicapping conditions	17.4
Age started formal education prior to age six	23.8
History of parental deafness	37.7

<sup>1</sup> Data for these items were edited.

<sup>2</sup> Only 5 percent of the records did not report some audiological results.

Information on age and sex was submitted for most students. When the information for these items was missing, it was obtained by correspondence with the reporting source. In a few cases it was necessary to estimate the age and determine the sex of the student utilizing other information on the records, e.g., the number of years in school and the name of the student.

Data on better ear averages shown in this report were determined by averaging the puretone threshold levels for the better ear at the frequencies of 500, 1000 and 2000 cycles per second. Table A shows that this information was not available for about 25 percent of the students. Of this number only about 5 percent of the forms actually did not report any audiological results. The remaining 20 percent contained audiological information, but did not give results for one or more of the frequencies used to compute the better ear average. Of those students asked the question on hearing aid use, the information was not available or unknown for 20 percent.

Data on age at onset of hearing loss were not available for 19.3 percent of the records. The age that the hearing loss was discovered was not reported on 52.6 percent of the records. It is uncertain at this time whether information on age at discovery and age of onset was not collected by the reporting sources or whether the information was not known by the parents or medical examiner providing the reporting source with its data.

Information on the etiology or cause of the student's hearing loss was not reported for 54 percent of the students. In addition to providing check boxes on the questionnaire for specific causes, a box was provided for the respondent to record if there was "No Known Cause" for the hearing loss. This box was checked for 23 percent of the students. This question was either blank or the "Data Not Available" box was marked for 31 percent of the students. It is possible that some respondents may have checked the "No Known Cause" box, however, to indicate that the reporting source did not have the information rather than there was no known medical cause for the hearing loss.

Information on additional handicapping conditions was not reported for about 17 percent of the students. Excluding the edited variables, the rate of non-reporting for this item was the lowest for the variables presented in this report.

The age of students when they first began their formal education prior to age six was not available for 24 percent of the records. The rate of non-reporting for items relative to parental history of deafness prior to age six was 38 percent.

Because of the importance of reducing the rates of non-reporting, the Survey has adopted procedures designed to obtain missing information. On the basis of results to date, it is expected that non-reporting rates of unavailable data will be lower in coming years.

Efforts also are being undertaken by the Survey Office to utilize more of the data that are reported. For example, in the case of better ear averages, 20 percent of the records reported some audiological information but not enough to compute a better ear average. Evaluation is now being done on this 20 percent to be able to describe the hearing loss with the information that has been supplied and therefore reduce this large percentage of unusable data.

## DISCUSSION OF THE DATA

In the series of tables which follow, summaries are presented for some of the data collected on 35,285 students enrolled in participating special educational programs for the hearing impaired. A description of the characteristics presented in the tables and highlights of the data are discussed here.

### States

As mentioned previously, all special educational programs for the hearing impaired known to the Survey Office were contacted and invited to participate in the Annual Survey. Data were collected from forty-nine states and the District of Columbia. Table 1 presents a distribution of the records received from these states. It must be emphasized here that these data represent only the enrollment in those programs participating in the Annual Survey. They do not indicate the total number or distribution of hearing impaired students enrolled in special educational programs or the number of hearing impaired children in any state.

A special survey is now under way that is designed to provide estimates of the total number of children in special educational programs in each state. Therefore, in a later publication we will be able to relate participation in the Annual Survey to the actual enrollment in each state.

### Sex and Age

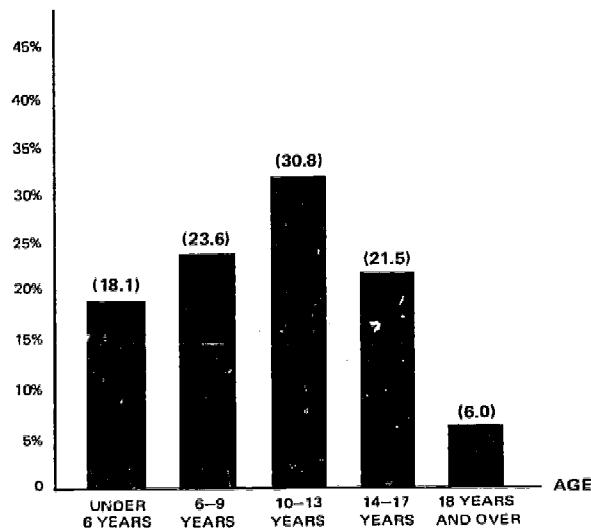
The sex distribution of the students for whom data were obtained is shown in Table B. Fifty-four percent of the students were males and forty-six percent females. This distribution is almost identical to that reported in the 1968-69 Annual Survey data, and similar to the sex ratios for hearing impaired students in special educational programs reported in other studies.

TABLE B: Number and percentage distribution of students enrolled in participating special educational programs for the hearing impaired by sex: United States, 1969-70 school year

Sex	Number	Percent
Total	35,285	100.0
Males	19,082	54.1
Females	16,203	45.9

Age is defined in this report as the chronological age of the student as of December 31, 1969. Chart 1 presents in broad age groups a graphic representation of the age distribution of the 35,285 students on whom data were collected. A little more than 18 percent of the students were under 6 years of age. About 24 percent were in the age group from 6 to 9 years; about 31 percent were from 10 to 13 years; 22 percent were from 14 to 17 years and 6 percent were 18 years and over.

CHART 1: Percentage distribution by age of students enrolled in participating special educational programs for the hearing impaired: United States, 1969-70 school year



As seen in detailed Table 2, however, by single years the greatest number of students were age 5, (3,478) accounting for more than half of the children under six. Five year old students accounted for approximately 10 percent of all the students. It is also worth noting that the number of 6 year olds (1,766) is only about half of the number of 5 year olds. These data also show a relatively higher proportion of children from 9-11 years of age. The larger number of students at age 5, and 9 through 11 reflect the rubella epidemic of 1964 and also an earlier outbreak that occurred during the late fifties.

#### Hearing Threshold Levels

A distribution of the hearing threshold levels (better ear averages) of the students is shown in detailed Table 3. As previously stated, the better ear averages were determined from averaging puretone thresholds for the speech range (500, 1000 and 2000 Hz) in the better ear. Better ear averages are given in

decibels according to the ISO<sup>1</sup> standard. For the purposes of this report, audiological data reported in ASA<sup>2</sup> standard were converted to the ISO standard by adding ten decibels to the ASA average. The data had to be converted from the ASA standard to the ISO standard for about 13 percent of the students. In all, data were available to compute better ear averages for 26,355 students.

In Table 3 you will note the category "Unable to Compute." This refers to approximately 20 percent of the students for whom better ear averages could not be determined due to the omission of results for one or more of the frequencies used to compute the average. However, no audiological information at all was supplied on 5 percent of the records.

Table C and Chart 2 show the distribution of hearing losses excluding students for whom data were not reported or were not usable. The largest percentage of students had better ear averages of 85 dB and above. This group accounted for almost one half of the students.

There were 518 students (2.0 percent) whose better ear averages were under 15 decibels. Our data show that these are mostly students with a severe loss in the worse ear.

<sup>1</sup> International Organization for Standardization

<sup>2</sup> American Standard Association

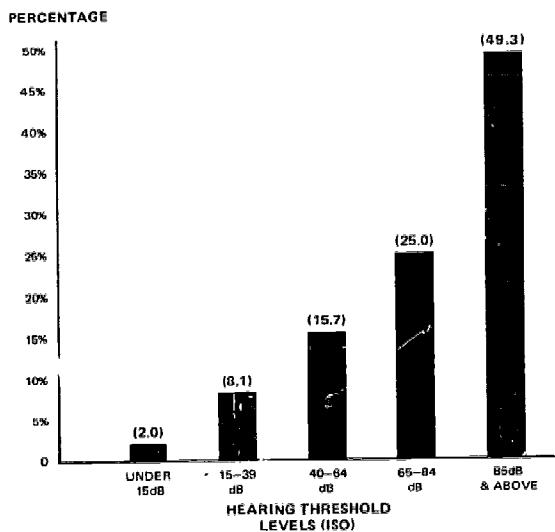
TABLE C: Number and percent distribution, by hearing threshold levels, of students enrolled in participating special educational programs for the hearing impaired: United States, 1969-70 school year

Hearing Threshold Levels in Decibels (ISO) <sup>1</sup>	Number of Students <sup>2</sup>	Percent
All dB levels	26,355	100.0
Under 15 dB	518	2.0
15-39 dB	2,130	8.1
40-64 dB	4,140	15.7
65-84 dB	6,587	25.0
85 dB & above	12,980	49.3

<sup>1</sup>Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

<sup>2</sup>Excludes those for whom data were not reported or the data were not usable.

CHART 2: Percentage distribution by hearing threshold levels of students enrolled in participating special educational programs for the hearing impaired: United States, 1969-70 school year<sup>1</sup>



<sup>1</sup>Excludes those for whom data were not reported or the data were not usable.

#### Additional Handicapping Conditions

Data describing handicaps the students had in addition to impaired hearing are shown in Table 4. This table shows the number of times the particular conditions were reported. For some students more than one additional handicapping condition was reported. If a particular child had both a "Severe Visual" problem and "Emotional Problems," his condition would be counted in both categories. As an example, the total column for a specific condition such as "Severe Visual" indicates the number of different students reported to have the condition. Detailed Table 4 also indicates the number of times the particular conditions were the only additional handicap and the number of times the condition was reported in combination with another condition.

Also shown in Table 4 are the rates of occurrence of the additional handicapping conditions. These are expressed as the total number of conditions per 1,000 students. These computations are based on all students (including those reported as having no additional handicapping conditions) for whom information was received. Excluded from the computations are the 6,154 students for whom no data were obtained for this item.

The condition reported most frequently was that of mental retardation. The rate of occurrence for this condition was 71.5 cases per 1,000 students.

Sixty-one students per 1,000 were reported to have educationally significant behavioral problems in addition to their hearing impairment, and 68 per 1,000 were reported to have emotional problems.

TABLE D: Number and rate of additional handicapping conditions among hearing impaired students enrolled in participating special educational programs: United States, 1969-70 school year

Number of Additional Handicapping Conditions Reported	Number	Percent
<b>Total Number Students</b>	<b>35,285</b>	<b>100.0</b>
No additional handicapping conditions	19,698	55.8
One additional handicapping condition	7,027	19.9
Two or more additional handicapping conditions	2,406	6.8
Not reported	6,154	17.4

As seen in Table D, 56 percent of the students had no additional handicapping conditions. Only 20 percent had one additional handicap and 7 percent had two or more handicaps in addition to the hearing impairment. If the 17 percent for whom this information was not available are omitted, the percentages would be as follows:

No additional handicapping conditions 67.6%  
 One additional handicapping condition 24.1%  
 Two or more additional conditions 8.3%

The questionnaire item regarding additional handicapping conditions (See Appendices II & III) provided "check boxes" for reporting selected conditions and provided space to write in other conditions. Some of the more frequently appearing "write-in" responses were "brain damage," "heart disorders" and "orthopedic disorders." The category "Learning Disabilities" includes a variety of responses that were written in such as "learning disability," "slow learner," "aphasic," "reading problems," etc.

It should be noted further that reported conditions such as "Emotional Problems" and "Behavioral Problems" are frequently based on subjective judgments, whereas the diagnoses for other types of handicapping conditions are usually based on physiological, psychometric, and other evidence.

#### Age At Onset And Age Loss Discovered

Tables 5 and 6 present data for the age at onset of hearing loss and the age at which the hearing loss was discovered. As can be seen, the probable age at onset was known for 81 percent of the students while information was available for only 47 percent of the students regarding the age the loss was discovered.

Age as used in these tables is defined in full years. Therefore, children whose ages at onset are reported as two years of age includes those reported onsets at 24 to 35 months.

Text Tables E and F summarize the data collected on these variables. For 63 percent of the students the age at onset of hearing loss was at birth. Seventy-five percent reported the onset either at birth or under 3 years. Only one percent, however, reported the age of discovery to be at birth and only about 30 percent reported the age of discovery as under 3 years. Later tabulations of these data will provide a better opportunity to analyze the relationship between onset of loss and discovery. However, as indicated in Table G when the percentages are based on only those students for whom data were obtained, the lag between onset and discovery is not as great.

TABLE E: Number and percent distribution, by age at onset of hearing loss, for students enrolled in participating special educational programs for the hearing impaired: United States, 1969-70 school year

Age at Onset of Hearing Loss	Number	Percent
<u>Total Students</u>	<u>35,285</u>	<u>100.0</u>
Onset at birth	22,102	63.0
Under 3 years	4,268	12.1
3-6 years	1,591	4.5
7 years and over	528	1.5
Unknown or not reported	6,796	19.3

TABLE F: Number and percent distribution, by age hearing loss discovered, for students enrolled in participating special educational programs for the hearing impaired: United States, 1969-70 school year

Age Hearing Loss Discovered	Number	Percent
<u>Total Students</u>	<u>35,285</u>	<u>100.0</u>
Discovered at birth	191	.5
Under 3 years	10,539	29.9
3-6 years	4,716	13.4
7 years and over	1,279	3.6
Unknown or not reported	18,560	52.6

TABLE G: Percentage distribution by age at onset of hearing loss and age loss discovered for students enrolled in participating special educational programs for the hearing impaired: United States, 1969-70 school year

Age in Years	Age at Onset	Age Loss Discovered
<u>Total</u>	<u>100.0<sup>1</sup></u>	<u>100.0<sup>2</sup></u>
At birth	77.6	1.1
Under 3	15.0	63.0
3-6	5.6	28.2
7 & over	1.9	7.6

<sup>1</sup>Omitted from the computation are the 6,796 students for whom age at onset was not reported.

<sup>2</sup>Omitted from the computation are the 18,560 students for whom the age the loss was discovered was not reported.

#### Probable Cause of Hearing Loss

Information on the probable cause of the student's hearing loss was requested on all students. As previously mentioned, the rate of non-reporting for this item was 31 percent. "Check boxes" were provided for this item as well as a space for the

respondent to write in a cause. Table 7 presents data for the number of times particular causes were attributed for the hearing loss. If the loss was attributed to two or more causes, each cause was counted. Text Table H indicates, however, that for 42 percent of all the students only a single cause was reported. If the 19,110 students for whom the data were not reported are excluded from the computations, a single cause for the hearing loss was reported for 93 percent of the students.

TABLE H: Number and percentage distribution, by cause of hearing loss of those students enrolled in participating special educational programs for the hearing impaired: United States, 1969-70 school year

Probable Cause of Hearing Loss	Number	Percent
<b>Total Students</b>	<b>35,285</b>	<b>100.0</b>
Single cause reported for hearing loss	14,970	42.4
Onset at birth	9,829	27.9
Onset after birth	5,141	14.5
Multiple cause reported for hearing loss	1,205	3.4
Onset at birth	800*	2.3*
Onset after birth	405*	1.1*
No known cause	8,038	22.8
Not reported	11,072	31.4

\* These distributions are estimated.

As previously mentioned in the section Qualifications and Limitations of the Data, the "check boxes" for No Known Cause and Data Not Available may have been used interchangeably by various respondents. The "No Known Cause" box was checked for over 8,000 students.

The detailed table also presents the rate of occurrence of the various causes. These are expressed as the total incidence of causes per 1,000 students. These computations are based on all students for

whom information was received, but exclude the 19,110 students for whom the data were not available or not reported. For the 19,110 students it is believed a large percentage of these had hearing losses at birth.

Of all the known causes, maternal rubella was the most frequently reported cause. The rate of occurrence was 267 per thousand (4,321 students). Hereditary factors were attributed to the loss of hearing for 2,390 students or a rate of 147.8 students per thousand. For cases where the cause was reported as occurring after birth, meningitis was reported more frequently than any other specific cause. It was reported as a cause for 1,677 students.

There were 2,003 write-in responses for causes of hearing loss with onset after birth. A large percentage of these were reported as "high fever" and "infections."

#### History of Parental Deafness Prior to Age Six

Included in the data form section "History of Hearing Loss" were questions related to family history of hearing loss. The respondent was asked if the student's parents had normal hearing or a hearing loss before age six. This question was asked about both the child's father and mother. Data regarding parental hearing losses prior to age six are shown in Table 8. The large proportion (38 percent) of students for whom this information was not reported should be noted. For 55 percent of the students both parents had normal hearing and a little over 5 percent reported that at least one parent suffered a hearing loss prior to age six.

However, when the 13,295 students for whom the information on both parents was unknown are omitted from the computation, the following percentage distribution is obtained:

Both Parents Normal Hearing . . . . .	88.2 %
Both Parents with Loss . . . . .	4.0 %
One Parent with Loss . . . . .	4.6 %
One Parent Normal, Information on Other Parent Not Reported . . . . .	3.3 %

It should be noted that the data in Table 8 refer to the number of students. There were 1,889 students who had at least one parent with a hearing loss prior to age six. Of this number there were 869 students whose mother and father had a loss and therefore the total number of parents with a hearing loss is 2,758.

#### Hearing Aid Use

During the 1969-70 school year, the section "Hearing Aid Use" appeared only on the data

collection form for children under six years of age (ACHIC-4). This variable, however, was collected and coded on all students for the 1968-69 school year. Therefore, where this information was available for a student six years of age or older who was reported to the Survey again during the 1969-70 school year, it has been included in the tables. The total number of students for whom this question was asked either during the first year of data collection or the second year accounts for 29,654 students. Of this number, 19 percent of the records did not report information or the information was unknown.

As seen in Table I of those asked the question, 54 percent used a personal aid. As noted in the directions for completing the form, "use" is defined here as meaning the student wears the aid at least one hour per day. This question may have been interpreted differently, however, by various respondents. These 54 percent who use an aid may not use their aid regularly.

TABLE I: Number and percent distribution, by hearing aid use, of students enrolled in participating special educational programs for the hearing impaired: United States, 1969-70 school year

Hearing Aid Use	Number	Percent
Total Students Asked Question	29,654	100.0
Student does not use personal aid	7,831	26.4
Student uses personal aid	16,045	54.1
Unknown or not reported	5,778	19.5

#### Age Started Education Prior To Age Six

The "Educational History" section sought information on the age the student started his formal educational training prior to age six. Table 10 indicates this information was not reported for 24 percent of the students. When these 8,397 students for whom the data were not available are excluded from the base population, it is found that 70 percent of the students received some education prior to age six, of whom 11 percent started their education prior to age three.

TABLE J: Number and percent distribution, by age started education prior to age six, of students enrolled in participating special educational programs for the hearing impaired: United States, 1969-70 school year

Age Started Education Prior to Age Six	Number <sup>1</sup>	Percent
Total Students	26,888	100.0
Under 3 years of age	3,021	11.2
3-5 years of age	14,276	53.1
Some education, but age started unknown	1,580	5.9
No education prior to age six	8,011	29.8

<sup>1</sup>Excludes those for whom data were not available.

This early educational training may not have been extensive or necessarily have been related to the child's hearing impairment. A later report on this variable will include more information about those kinds of educational programs in which students were enrolled.

#### SUMMARY

One-dimensional summaries of selected characteristics for 35,285 students enrolled in participating special educational programs for the hearing impaired have been presented. The methodology used in collecting the data has been discussed along with the qualifications and limitations of the data.

It was noted that these 35,285 students represented about 80 percent of the estimated enrollment in those programs invited to participate. It also was mentioned that students receiving itinerant services for their hearing impairment were underrepresented in the data.

Highlights from the discussion of the data include the fact that five year old students accounted for nearly 10 percent of all students and it was indicated that of those for whom a better ear average was obtained, almost one half had a better ear average of 85dB and above.

Regarding additional handicapping conditions, it should be noted that of those for whom information was reported, 32 percent of the students had an additional handicapping condition. For these students, mental retardation was the condition most frequently reported.

Age at onset of hearing loss was reported as occurring at birth for 78 percent of the students for whom the information was given. For students for whom age of discovery of hearing loss was reported, discovery occurred either at birth or prior to 3 years of age for about 64 percent of the students. The most frequently reported cause of hearing loss was maternal rubella which was reported as the only cause or in combination with another cause for 4,321 students (27 percent). Similarly, hereditary factors were attributed to the hearing loss of 2,390 students (15 percent).

Data on parental history of deafness prior to age six were collected, and where the information was

available, it was found that 9 percent of the students had at least one parent who had a hearing loss prior to age six. Of those students for whom information was requested and it was reported, 33 percent were known not to use a personal hearing aid. The final variable discussed was the age the child started his education prior to age six. Thirty percent of the students had no education prior to age six while 70 percent had some training.

Future reports issued by the Survey Office will provide further details regarding these variables and other variables collected during the 1969-70 school year.

## **LIST OF DETAILED TABLES**

**TABLE 1:** Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by States: United States, 1969-70 School Year.

**TABLE 2:** Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Age: United States, 1969-70 School Year.

**TABLE 3:** Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Hearing Threshold Levels: United States, 1969-70 School Year.

**TABLE 4:** Number and Rate Per 1,000 Students, of Additional Handicapping Conditions Among Students Enrolled in Participating Special Educational Programs for the Hearing Impaired: United States, 1969-70 School Year.

**TABLE 5:** Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Age at Onset of Hearing Loss: United States, 1969-70 School Year.

**TABLE 6:** Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Age Hearing Loss Discovered: United States, 1969-70 School Year.

**TABLE 7:** Number and Rate Per 1,000 Students, of Probable Causes of Hearing Loss Among Students Enrolled in Participating Special Educational Programs for the Hearing Impaired: United States, 1969-70 School Year.

**TABLE 8:** Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by History of Parental Deafness Before Age Six: United States, 1969-70 School Year.

**TABLE 9:** Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Hearing Aid Use: United States, 1969-70 School Year.

**TABLE 10:** Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Age Started Formal Education Prior to Age Six: United States, 1969-70 School Year.

TABLE: 1 NUMBER AND PERCENTAGE DISTRIBUTION OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY STATES: UNITED STATES, 1969-70 SCHOOL YEAR.

States	Number of Students	Percent
<b>Total</b>	<b>35,285<sup>1</sup></b>	<b>100.0</b>
ALABAMA	511	1.4
ALASKA	24	.1
ARIZONA	333	.9
ARKANSAS	14	*
CALIFORNIA	3,520	10.0
COLORADO	340	1.0
CONNECTICUT	296	.8
DELAWARE	101	.3
DISTRICT OF COLUMBIA	329	.9
FLORIDA	864	2.4
GEORGIA	645	1.8
HAWAII	154	.4
IDAHO	117	.3
ILLINOIS	2,032	5.8
INDIANA	771	2.2
IOWA	476	1.3
KANSAS	514	1.5
KENTUCKY	442	1.3
LOUISIANA	638	1.8
MAINE	189	.5
MARYLAND	720	2.0
MASSACHUSETTS	800	2.3
MICHIGAN	1,594	4.5
MINNESOTA	749	2.1
MISSISSIPPI	—	—
MISSOURI	692	2.0
MONTANA	116	.3
NEBRASKA	233	.7
NEVADA	52	.1
NEW HAMPSHIRE	136	.4
NEW JERSEY	398	1.1
NEW MEXICO	213	.6
NEW YORK	2,483	7.0
NORTH CAROLINA	1,004	2.8
NORTH DAKOTA	117	.3
OHIO	2,214	6.3
OKLAHOMA	110	.3
OREGON	596	1.7
PENNSYLVANIA	5,108	14.5
RHODE ISLAND	149	.4
SOUTH CAROLINA	431	1.2
SOUTH DAKOTA	112	.3
TENNESSEE	722	2.0
TEXAS	1,749	5.0
UTAH	225	.6
VERMONT	121	.3
VIRGINIA	663	1.9
WASHINGTON	697	2.0
WEST VIRGINIA	182	.5
WISCONSIN	539	1.5
WYOMING	50	.1

\*Less than .05 percent.

<sup>1</sup>These figures represent only the enrollment in those programs participating in the Annual Survey. They do not indicate the total number of hearing impaired students enrolled in special educational programs within particular states.

TABLE 2: NUMBER AND PERCENTAGE DISTRIBUTION OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY AGE: UNITED STATES, 1969-70 SCHOOL YEAR

Age	Number of Students	Percent
All Ages	35,285	100.0
Under 3 Years	336	1.0
3 Years	699	2.0
4 Years	1,865	5.3
5 Years	3,478	9.9
6 Years	1,766	5.0
7 Years	2,020	5.7
8 Years	2,076	5.9
9 Years	2,462	7.0
10 Years	2,946	8.3
11 Years	3,309	9.4
12 Years	2,362	6.7
13 Years	2,264	6.4
14 Years	2,115	6.0
15 Years	1,936	5.5
16 Years	1,836	5.2
17 Years	1,708	4.8
18 Years	1,168	3.3
19 Years	586	1.7
20 Years and Over	353	1.0

TABLE 3: NUMBER AND PERCENTAGE DISTRIBUTION OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY HEARING THRESHOLD LEVELS: UNITED STATES, 1969-70 SCHOOL YEAR

Better Ear Averages In Decibels (ISO) <sup>1</sup>	Number of Students	Percent
<b>All Hearing Levels</b>	<b>35,285</b>	<b>100.0</b>
<b>Under 15</b>	518	1.5
15-19	268	.8
20-24	265	.8
25-29	551	1.6
30-34	506	1.4
35-39	540	1.5
40-44	557	1.6
45-49	666	1.9
50-54	823	2.3
55-59	929	2.6
60-64	1,165	3.3
65-69	1,387	4.0
70-74	1,616	4.6
75-79	1,759	5.0
80-84	1,818	5.2
85-89	1,907	5.4
90-94	2,225	6.3
95-98	2,285	6.5
<b>99 and Above</b>	<b>6,563</b>	<b>18.6</b>
<b>Unable to Compute<sup>2</sup></b>	<b>7,187</b>	<b>20.4</b>
<b>Data Not Reported</b>	<b>1,743</b>	<b>4.9</b>

<sup>1</sup>Average hearing threshold in better ear computed at 500, 1,000, 2,000 cycles per second.

<sup>2</sup>The average could not be determined due to the omission of one or more of the frequencies used to compute the better ear average.

TABLE 4: NUMBER AND RATE PER 1,000 STUDENTS, OF ADDITIONAL HANDICAPPING CONDITIONS AMONG STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED: UNITED STATES, 1969-70 SCHOOL YEAR.

Additional Handicapping Conditions	Total Number of Reported Conditions <sup>1</sup>	Number of Conditions Per 1,000 Students <sup>2</sup>	Number of Times Condition Reported as the Only Additional Handicap	Number of Times Condition Reported in Combination With Other Handicapping Conditions
<b>Total</b>	<b>12,224</b>	<b>419.6</b>	<b>7,075</b>	<b>5,149</b>
Behavioral Problems	1,787	61.3	811	976
Brain Damage	154	5.3	128	26
Cerebral Palsy	965	33.1	635	330
Cleft Lip or Palate	188	6.5	136	52
Emotional Problems	1,975	67.8	855	1,120
Epilepsy	165	5.7	102	63
Heart Disorders	406	13.9	242	164
Learning Disabilities	908	31.2	817	91
Mental Retardation	2,083	71.5	1,220	863
Orthopedic Disorders	193	6.6	143	50
Perceptual Motor Disorders	1,588	54.5	842	746
Severe Visual	1,312	45.0	718	594
Other	500	17.2	426	74

<sup>1</sup>For some students more than one additional handicap was reported.

<sup>2</sup>Based on 29,131 students. Excluded are the 6,154 students for whom this information was not reported.

TABLE 5: NUMBER AND PERCENTAGE DISTRIBUTION OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY AGE AT ONSET OF HEARING LOSS: UNITED STATES, 1969-70 SCHOOL YEAR

Age at Onset of Hearing Loss	Number of Students	Percent
<b>Total</b>	<b>35,285</b>	<b>100.0</b>
<b>Onset at Birth</b>	<b>22,102</b>	<b>62.6</b>
<b>Under 1 Year</b>	<b>1,530</b>	<b>4.3</b>
<b>1 Year</b>	<b>1,663</b>	<b>4.7</b>
<b>2 Years</b>	<b>1,075</b>	<b>3.0</b>
<b>3 Years</b>	<b>632</b>	<b>1.8</b>
<b>4 Years</b>	<b>353</b>	<b>1.0</b>
<b>5 Years</b>	<b>317</b>	<b>.9</b>
<b>6 Years</b>	<b>289</b>	<b>.8</b>
<b>7 Years</b>	<b>167</b>	<b>.5</b>
<b>8 Years</b>	<b>133</b>	<b>.4</b>
<b>9 Years and Over</b>	<b>228</b>	<b>.6</b>
<b>Unknown</b>	<b>6,796</b>	<b>19.3</b>

TABLE 6: NUMBER AND PERCENTAGE DISTRIBUTION OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY AGE HEARING LOSS DISCOVERED: UNITED STATES, 1969-70 SCHOOL YEAR

Age Hearing Loss Discovered	Number of Students	Percent
<b>Total</b>	<b>35,285</b>	<b>100.0</b>
<b>Discovered at Birth</b>	<b>191</b>	<b>.5</b>
<b>Under 1 Year</b>	<b>3,003</b>	<b>8.5</b>
<b>1 Year</b>	<b>4,068</b>	<b>11.5</b>
<b>2 Years</b>	<b>3,468</b>	<b>9.8</b>
<b>3 Years</b>	<b>1,789</b>	<b>5.1</b>
<b>4 Years</b>	<b>919</b>	<b>2.6</b>
<b>5 Years</b>	<b>1,023</b>	<b>2.9</b>
<b>6 Years</b>	<b>985</b>	<b>2.8</b>
<b>7 Years</b>	<b>479</b>	<b>1.4</b>
<b>8 Years</b>	<b>288</b>	<b>.8</b>
<b>9 Years and Over</b>	<b>512</b>	<b>1.5</b>
<b>Unknown</b>	<b>18,560</b>	<b>52.6</b>

TABLE 7: NUMBER AND RATE PER 1,000 STUDENTS, OF PROBABLE CAUSES OF HEARING LOSS AMONG STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED: UNITED STATES, 1969-70 SCHOOL YEAR

Probable Cause of Hearing Loss	Total Number of Specified Causes <sup>1</sup>	Occurrence of Specified Cause Per 1,000 Students <sup>2</sup>	Number of Times Specified Cause Attributed as the Only Cause of Hearing Loss	Number of Times Specified Cause Reported in Combination With Other Causes
<b><u>Causes of Hearing Loss With Onset at Birth</u></b>				
Maternal Rubella	4,321	267.1	4,057	264
Trauma at Birth	579	35.8	382	197
Trauma to Mother	161	10.0	80	81
Medication During Pregnancy	181	11.2	95	86
Prematurity	1,610	99.5	1,081	529
Rh Incompatibility	1,076	66.5	826	250
Complications of Pregnancy	681	42.1	389	292
Hereditary	2,390	147.8	2,287	103
Other Causes	706	43.6	632	74
<b><u>Causes of Hearing Loss With Onset After Birth</u></b>				
Meningitis	1,677	103.7	1,606	71
Mumps	269	16.6	153	116
Measles	910	56.3	685	225
Otitis Media	711	44.0	579	132
Trauma	317	19.6	283	34
Other Causes <sup>3</sup>	2,003	123.8	1,835	168

<sup>1</sup>For some students more than one cause was reported.

<sup>2</sup>Based on 16,175 students for whom a specified cause was reported. Excludes 19,110 students for whom there was no known cause or a cause was not reported.

<sup>3</sup>A large proportion of these were reported as "High Fever".

TABLE 8: NUMBER AND PERCENTAGE DISTRIBUTION OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY HISTORY OF PARENTAL DEAFNESS BEFORE AGE SIX: UNITED STATES, 1969-70 SCHOOL YEAR

History of Parental Deafness Before Age Six	Number of Students	Percent
<b>Total</b>	<b>35,285</b>	<b>100.0</b>
<b>Both Parents Normal Hearing</b>	<b>19,385</b>	<b>54.9</b>
<b>At Least One Parent With Hearing Loss</b>	<b>1,889<sup>1</sup></b>	<b>5.4</b>
<b>Both Parents With Loss</b>	869	2.5
<b>Mother With Loss: Father Normal</b>	261	.7
<b>Father With Loss: Mother Normal</b>	199	.6
<b>One Parent With Loss: Other Parent Normal</b>	372	1.1
<b>Mother With Loss: Information on Father Not Available</b>	140	.4
<b>Father With Loss: Information on Mother Not Available</b>	48	.1
<b>Mother Normal: Information on Father Not Available</b>	<u>583</u>	<u>1.7</u>
<b>Father Normal: Information on Mother Not Available</b>	<u>133</u>	<u>.4</u>
<b>Unknown or Not Reported for Both Parents</b>	<b>13,295</b>	<b>37.7</b>

<sup>1</sup>Total number of parents reported as having a hearing loss prior to age six is 2,758.

TABLE 9: NUMBER AND PERCENTAGE DISTRIBUTION OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY HEARING AID USE: UNITED STATES, 1969-70 SCHOOL YEAR

Hearing Aid Use	Number of Students	Percent
<b>Total</b>	<b>29,654<sup>1</sup></b>	<b>100.0</b>
<b>Student Does Not Use Personal Aid</b>	<b>7,831</b>	<b>26.4</b>
<b>Student Uses Monaural Aid</b>	<b>10,926</b>	<b>36.8</b>
<b>Student Uses Binaural Aid</b>	<b>2,894</b>	<b>9.8</b>
<b>Student Uses Y Cord</b>	<b>1,349</b>	<b>4.5</b>
<b>Uses Aid, Type Not Reported</b>	<b>876</b>	<b>3.0</b>
<b>Unknown or Not Reported</b>	<b>5,778</b>	<b>19.5</b>

<sup>1</sup>Does not include 5,631 students for whom this information was not requested.

TABLE 10: NUMBER AND PERCENTAGE DISTRIBUTION OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY AGE STARTED FORMAL EDUCATION PRIOR TO AGE SIX: UNITED STATES, 1969-70 SCHOOL YEAR

Age Started Formal Education Prior To Age Six	Number of Students	Percent
<b>Total</b>	<b>35,285</b>	<b>100.0</b>
<b>1 Year of Age</b>	<b>787</b>	<b>2.2</b>
<b>2 Years of Age</b>	<b>2,234</b>	<b>6.3</b>
<b>3 Years of Age</b>	<b>4,798</b>	<b>13.6</b>
<b>4 Years of Age</b>	<b>4,343</b>	<b>12.3</b>
<b>5 Years of Age</b>	<b>5,135</b>	<b>14.6</b>
<b>Some Education, but Age Started Unknown</b>	<b>1,580</b>	<b>4.5</b>
<b>No Education Prior to Age Six</b>	<b>8,011</b>	<b>22.7</b>
<b>Unknown or Not Reported</b>	<b>8,397</b>	<b>23.8</b>

## **APPENDICES**

- Appendix I — Description of the Annual Survey of Hearing Impaired Children and Youth**
- Appendix II — Basic Data Form Used in the Annual Survey for the 1969-70 School Year**
- Appendix III — Preschool Data Form Used in the Annual Survey for the 1969-70 School Year**
- Appendix IV — Programs Participating in the Annual Survey of Hearing Impaired Children and Youth**

# APPENDIX I

## THE ANNUAL SURVEY OF HEARING IMPAIRED CHILDREN AND YOUTH

### BACKGROUND AND PURPOSE

The Annual Survey of Hearing Impaired Children and Youth began its activities in May, 1968. The program is established as a permanent research organization to collect, process and disseminate data on hearing impaired individuals through college age in the United States. The need for such information on this universe has been of prime concern to educators, audiologists, legislators, psychologists and others.

Two preceding years of pilot and developmental work in a five state area determined its operational feasibility and crystalized its methodology. The Division of Research, Bureau of Education for the Handicapped, Office of Education, Department of Health, Education and Welfare initiated the Annual Survey and provides the major share of its funding. The program is conducted by the Office of Demographic Studies of Gallaudet College.

The long range goal of the Annual Survey is to collect data on the entire hearing impaired population through college age in the United States. For operational reasons the hearing impaired population has been divided into three groups:

- GROUP A** — Hearing impaired individuals who are receiving special educational services related to their hearing loss.
- GROUP B** — Individuals who have been diagnosed as being hearing impaired but who are not receiving any special educational services.
- GROUP C** — Individuals in the general population who, in fact, are hearing impaired but their hearing loss has not been diagnosed at a given point of time.

### POLICIES AND PRINCIPLES

It is of paramount importance that participating institutions be assured that the data collected will

be held in strictest confidence. Only staff members of the Office of Demographic Studies will have access to the records and then only for the purpose of preparing statistical summaries for analyses of the data. Individual student identification may be established by code numbers assigned and known only by the reporting institution. Each school will receive data on its own students, but no information permitting identification of any individual student or school will be published or made available for any purpose. Independent researchers will have access only to summary statistics and will not know the identity of the schools from which the data were compiled.

Of great importance is the fact that policies and direction of the Annual Survey are determined by a committee representing all areas of services to hearing impaired individuals. The committee is formally called the National Advisory Committee to the Annual Survey of Hearing Impaired Children and Youth. Its membership has broad width and depth in technical and executive expertise. In addition, a technical subcommittee composed of members of the Advisory Committee is called upon for advice and direction as special needs arise.

Suggestions and comments also come from discussions with teachers, audiologists, psychologists and other professionals who work directly with hearing impaired individuals. Also, aside from these direct contacts the staff members of the Annual Survey have with people in the field, periodic formal surveys of the cooperating educational programs are conducted to aid in determining the kinds of information needed in the field. To be effective, the program must assist these persons in solving problems with which they struggle day after day.

Since the Annual Survey attempts to promote the use of its data by those whose judgements and decisions will have a direct or indirect bearing on the education of hearing impaired individuals, it recognizes a responsibility to devote a part of its resources to the evaluation of the quality of the data collected and disseminated. This is particularly im-

portant because it seeks to establish national norms on the basic characteristics of hearing impaired children and youth that may be used by teachers, administrators and researchers. Thus, in the dissemination of information, the Annual Survey makes every effort to properly qualify the data and indicate any limitation associated with it.

Fourthly, the Annual Survey devotes part of its resources to developing the methodologies and instruments for best collecting data on a continuing basis for a national population of hearing impaired children and youth. The methodologies and instruments are of two basic kinds: (1) those associated with basic demographic variables that are collected on the total student population each year, and (2) those relating to the performance of the student in various areas, or to topics of special interest in a given year which may be collected on a sample basis.

## DATA COLLECTION

### 1968-69 School Year

During the first year of the program, data collection activities were directed towards all schools for the deaf and a representative sample (15 percent) of all special classes. In addition, records on students who were receiving itinerant services were obtained in total from two states and in part from several states. In all 25,363 individual records were collected. This represented nearly 80 percent of the total enrollment of all institutions invited to participate.

Also during the first year, an academic Achievement Testing Program was conducted. Over 12,000 Stanford Achievement Tests were administered. The Annual Survey supplied testing materials and scoring services free of charge to participating programs. Achievement test scores for hearing impaired students based on the results of that testing program were published and distributed in the Fall of 1969. In addition, each participating school received distributions of achievement test scores based on the performance of their own students.

### 1969-70 School Year

The Annual Survey extended its coverage during the second year of data collection. Efforts were made to reach students in all of the special classes for the hearing impaired, as well as in all of the schools. Data were obtained on 35,285 students from 435 reporting sources.

### 1970-71 School Year

Approximately 600 reporting sources with about 42,000 students enrolled in their programs are cooperating with the Annual Survey for the 1970-71 school year. This represents an increase of 197 new participating educational programs with almost 8,000 students. At the same time, about 98 percent of those programs that participated last year have been retained in this year's Survey.

An Achievement Testing Program is being conducted again this year by the Annual Survey. Approximately 305 sources including roughly 22,000 students are involved in this program. The procedures being followed in the current program were influenced heavily by the results of the Achievement Testing Program conducted by the Annual Survey during the 1968-69 school-year. This influence is reflected especially in three areas of this year's program: (1) Students were given a screening test to determine the most appropriate battery they should receive. (2) The schools were supplied with practice materials for their students, to familiarize students with test format and procedures. (3) In cooperation with Harcourt Brace Jovanovich, Inc., the test publishers, special printings of the Primary levels were arranged in which written instructions were provided to supplement oral ones. A reliability study also is being conducted in conjunction with this year's Achievement Testing Program. This evaluation study will help to determine the reliability of an achievement test designed for hearing students when used by hearing impaired students. This study is also designed to shed some light on the validity of these tests.

## PROGRAM SERVICES AND PUBLICATION OF THE DATA

The program is accumulating a large volume of statistical data. The processing and dissemination of these data hold wide implications and potential benefits for educational, audiological, medical, psychological, legislative and other services to the hearing impaired. Towards the goal of fully utilizing the data, the program will make data available to independent investigators for research purposes. Masters' theses, doctoral dissertations, institutional level research programs, private studies, etc., are solicited. Competent researchers are encouraged to propose detailed analyses of the data to further increase its usefulness. The Office of Demographic Studies will not permit the data to be used in a manner that is not scientific or objective in its approach. The Annual Survey plans to produce at

least six major publications per year not including those that may be prepared by independent researchers using data collected by this program.

The Survey Office also provides each participating school or program with tabulations of the characteristics of their own students. The participating programs may obtain a set of punch cards containing the information submitted on each of their students. Further, the Annual Survey Office is available to provide consultation services to particular schools or school systems that are concerned with gathering and processing data on their students.

Participation in the Survey has led many of the programs to examine their current forms and record keeping procedures. This led to requests that the Survey develop a uniform record form to keep student information for use in schools and classes throughout the country. Such a form was developed

and used on a trial basis by a few schools during the 1970-71 school year. On the basis of this experience, the form was revised and will be distributed for use during the 1971-72 school year. Preliminary indications are that more than half of the educational programs in the United States are planning to use the form during the coming school year.

The initial success of the Annual Survey can be measured only in terms of the levels of participation and interest expressed by many individuals. The ultimate success will be measured not in terms of volume of data that will be collected and published, but in terms of its contributions to improving educational and other opportunities for hearing impaired children and youth. In this regard, it appears that progress is being made. For the first time a vast body of statistical information is becoming available for research and planning purposes.

## APPENDIX II

OFFICE OF DEMOGRAPHIC STUDIES  
GALLAUDET COLLEGE, WASHINGTON, D.C.

### BASIC DATA FORM

ACHIC-2

### ANNUAL SURVEY OF HEARING IMPAIRED CHILDREN—1969-70 School Year

**CONFIDENTIAL:** All information which would permit identification of any individual or institution will be held strictly confidential and will be used only by persons engaged in the survey for preparing statistical summaries. The data will not be disclosed to others for any other purpose.

Name of Reporting Source:

#### I. GENERAL INFORMATION

A. 1. Name of Student or Code Number	(Last)	(First)	(Middle)	Date of Birth	Sex
					<input type="checkbox"/> M <input type="checkbox"/> F
2. Residence	(City)		(County)	(State)	
B. 1. Present School or Agency					
(Name)					
2. Location	(Number and Street)		(City)	(County)	(State & ZIP Code)

#### II. EDUCATIONAL PROGRAM

A. 1. For students enrolled fulltime in a special class or school, check below:

<input type="checkbox"/> School for the Deaf	<input type="checkbox"/> Classes for Hearing Impaired
<input type="checkbox"/> School for Multiply Handicapped	<input type="checkbox"/> Classes for Multiply Handicapped

2. For students who do not attend a special school or class on a fulltime basis, enter type of program below:

Regular Classes \_\_\_\_\_ hours per week; plus itinerant services \_\_\_\_\_ hours per week.  
 Regular Classes \_\_\_\_\_ hours per week; plus other special educational services \_\_\_\_\_ hours per week.  
 Special Classes \_\_\_\_\_ hours per week  
 Other (specify type and hours per week): \_\_\_\_\_

B. 1. Type of school or agency:  Public     Private  
 2. Type of student:  Residential     Day

#### III. EDUCATIONAL HISTORY

A. Date first enrolled in this school: \_\_\_\_\_

B. Educational history since age six:

1. Total full years attended this school since age six: \_\_\_\_\_ (Do not include present school year)  
 2. Attendance at other schools since age six. (Do not include present school):  
 Mark all that apply. If none check here   
 Regular Classes    Regular Classes Plus    Fulltime Classes for Hearing Impaired    Schools for the Deaf-    Other-  
 Only \_\_\_\_\_ Years    Special Training- \_\_\_\_\_ Years    Impaired- \_\_\_\_\_ Years    \_\_\_\_\_ Years    \_\_\_\_\_ Years

C. Formal education prior to age six: If none check here  If unknown check here   
 1. Age started \_\_\_\_\_  
 2. Type (check all that apply):  

<input type="checkbox"/> Preschool for Hearing	<input type="checkbox"/> Preschool for Hearing Impaired	<input type="checkbox"/> Preschool for Hearing Plus Special Training
<input type="checkbox"/> Preschool for Multiply Handicapped	<input type="checkbox"/> Parent-Child Program	<input type="checkbox"/> Other (specify) _____

#### IV. HISTORY OF HEARING LOSS

##### A. STUDENT HISTORY

1. Probable age at onset of hearing loss:  At Birth    \_\_\_\_\_ Years of Age  
 2. Age hearing loss discovered: \_\_\_\_\_ Years    \_\_\_\_\_ Months  
 3. If onset of loss at birth, what was probable cause (mark all that apply):  No Known Cause     Data Not Available  

<input type="checkbox"/> Maternal Rubella	<input type="checkbox"/> Trauma to Mother	<input type="checkbox"/> Prematurity	<input type="checkbox"/> Complications of Pregnancy	<input type="checkbox"/> Hereditary
<input type="checkbox"/> Trauma at Birth	<input type="checkbox"/> Medication During Pregnancy	<input type="checkbox"/> RH Incompatibility	<input type="checkbox"/> Other (specify) _____	

4. If loss acquired after birth, what was probable cause (mark all that apply):  No Known Cause     Data Not Available  

<input type="checkbox"/> Meningitis	<input type="checkbox"/> Mumps	<input type="checkbox"/> Measles	<input type="checkbox"/> Otitis-Media	<input type="checkbox"/> Trauma
<input type="checkbox"/> Other (specify) _____				

5. Birth weight, if known: \_\_\_\_\_ lbs.    \_\_\_\_\_ ozs.

##### B. FAMILY HISTORY

1. Mother (check one):  Normal hearing before age 6;     Hearing loss before age 6;     Data not available.  
 2. Father (check one):  Normal hearing before age 6;     Hearing loss before age 6;     Data not available.  
 3. Siblings (indicate number in each category—if none, write "0"):  
 Total number \_\_\_\_\_;    Normal hearing before age 6 \_\_\_\_\_;    Hearing loss before age 6 \_\_\_\_\_;     Data not available  
 4. Does student have a twin:  Yes     No (If yes, complete items 4(a) and 4(b) below):  
 (a) Sex of twin:  M     F  
 (b) Is twin enrolled in this school:  Yes     No  
 5. Is there any familial history of deafness other than indicated above:  Yes     No  
 6. Are parents known to be related in any way:  Yes     No

**V. AUDIOLOGICAL FINDINGS**A.  Not Tested  Unable To Test  Tested, But Results Not AvailableB.  Tested (Record Results Below):1. Standard used for testing:  ISO  ASA  Free Field (Symbol )

Frequency	RIGHT EAR						LEFT EAR								
	125	250	500	1000	2000	4000	6000	8000	125	250	500	1000	2000	4000	6000
2. Air Conduction															
Bone Conduction															

**C. UNAIDED SPEECH THRESHOLD**1. Test Used:  SAT  SRT  Not Tested

Frequency	RIGHT EAR						LEFT EAR					
	0-15dB	16-29dB	30-44dB	45-59dB	60-79dB	80dB & over	0-15dB	16-29dB	30-44dB	45-59dB	60-79dB	80dB & over
2.												

**D. EXAMINER IDENTIFICATION**

Name of clinic or place conducting audiological examination \_\_\_\_\_

Date \_\_\_\_\_

Address \_\_\_\_\_ (Number and Street) \_\_\_\_\_ (City) \_\_\_\_\_ (State &amp; ZIP Code) \_\_\_\_\_

Profession of Examiner:  Audiologist  Otologist  Other M.D.  Audiometrist  Nurse  Teacher

Other (specify) \_\_\_\_\_

**VI. INTELLIGENCE TEST**

Indicate results of most recent intelligence test

Description of Test		I.Q. Scores		
Name	Level	Verbal	Nonverbal	Date Tested
				(Month, Yr.)

**VII. ADDITIONAL HANDICAPPING CONDITIONS**Check all educationally significant handicapping conditions: If none, check here 

<input type="checkbox"/> Epilepsy	<input type="checkbox"/> Severe Visual	<input type="checkbox"/> Emotional Problems	<input type="checkbox"/> Perceptual-Motor Disorders
<input type="checkbox"/> Cleft Lip or Palate	<input type="checkbox"/> Mental Retardation	<input type="checkbox"/> Behavioral Problems	<input type="checkbox"/> Cerebral Palsy
<input type="checkbox"/> Other (describe) _____			

**COMMENTS:**

## APPENDIX III

OFFICE OF DEMOGRAPHIC STUDIES, GALLAUDET COLLEGE, WASHINGTON, D.C.

ACHIC-4

(This form is to be used for children who will become six years of age after December 31, 1969)

### ANNUAL SURVEY OF HEARING IMPAIRED CHILDREN — 1969-70 School Year

**CONFIDENTIAL:** All information which would permit identification of any individual or institution will be held strictly confidential and will be used only by persons engaged in the survey for preparing statistical summaries. The data will not be disclosed to others for any other purpose.

Name of Reporting Source:

#### I. GENERAL INFORMATION

A. 1. Name of Student or Code Number	(Last)	(First)	(Middle)	Date of Birth	Sex
2. Residence			(City)	(County)	(State)
B. 1. Present School or Agency				(Name)	
2. Location	(Number and Street)	(City)	(County)	(State & ZIP Code)	

#### II. EDUCATIONAL PROGRAM

##### A. TYPE OF SCHOOL OR AGENCY

1. <input type="checkbox"/> School for Hearing <input type="checkbox"/> Classes for Hearing Impaired <input type="checkbox"/> Other (specify):	<input type="checkbox"/> Residential School for Deaf <input type="checkbox"/> Day School for Deaf	<input type="checkbox"/> School for Multiply Handicapped <input type="checkbox"/> Speech and Hearing Clinic
--	--	--

2. Is School or Agency:  Public  Private  
3. Type of Student:  Residential  Day

##### B. TYPE OF PROGRAM

1. Indicate number of hours per week the child is seen: \_\_\_\_\_ Hours Per Week
2. Is the child seen:  Individually  Group or  Both
3. Total time child has been enrolled in this school or agency: \_\_\_\_\_ Years \_\_\_\_\_ Months
4. Parent Training:
  - (a) Are parents enrolled in a special parent program:  Yes  No
  - (b) Are parents participating in a correspondence course:  Yes  No

#### III. EDUCATIONAL HISTORY

A. Prior to the present program, has the child received other special educational training:  Yes  No

1. If YES, age started first program: \_\_\_\_\_ Years \_\_\_\_\_ Months
2. Type (specify): \_\_\_\_\_
3. Total time enrolled: \_\_\_\_\_ Years \_\_\_\_\_ Months

#### IV. HISTORY OF HEARING LOSS

##### A. STUDENT HISTORY

1. Probable age at onset of hearing loss:  At Birth \_\_\_\_\_ Years of Age
2. Age hearing loss discovered: \_\_\_\_\_ Years \_\_\_\_\_ Months
3. If onset of loss at birth, what was probable cause (mark all that apply):  No Known Cause  Data Not Available  
 Maternal Rubella  Trauma to Mother  Prematurity  Complications of Pregnancy  Hereditary  
 Trauma at Birth  Medication During Pregnancy  RH Incompatibility  Other (specify): \_\_\_\_\_
4. If loss acquired after birth, what was probable cause (mark all that apply):  No Known Cause  Data Not Available  
 Meningitis  Mumps  Measles  Otitis-Media  Trauma  
 Other (specify): \_\_\_\_\_
5. Birth weight, if known: \_\_\_\_\_ lbs. \_\_\_\_\_ ozs.

##### B. FAMILY HISTORY

1. Mother (check one):  Normal hearing before age 6;  Hearing loss before age 6;  Data not available.  
 Data not available.
2. Father (check one):  Normal hearing before age 6;  Hearing loss before age 6;  Data not available.  
 Data not available.
3. Siblings (indicate number in each category—if none, write "0"):  
Total number \_\_\_\_\_; Normal hearing before age 6 \_\_\_\_\_; Hearing loss before age 6 \_\_\_\_\_;  Data not available
4. Does student have a twin:  Yes  No (If yes, complete items 4(a) and 4(b) below):
  - (a) Sex of twin:  M  F
  - (b) Is twin enrolled in this school:  Yes  No
5. Is there any familial history of deafness other than indicated above:  Yes  No
6. Are parents known to be related in any way?  Yes  No

**V. AUDIOLOGICAL FINDINGS**A.  Not Tested  Unable To Test  Tested, But Results Not AvailableB.  Tested (Record Results Below):1. Standard used for testing:  ISO  ASA  Free Field (Symbol )

Frequency	RIGHT EAR								LEFT EAR							
	125	250	500	1000	2000	4000	6000	8000	125	250	500	1000	2000	4000	6000	8000
2. Air Conduction																
Bone Conduction																

## C. UNAIDED SPEECH THRESHOLD

1. Test Used:  SAT  SRT  Not Tested

2.	RIGHT EAR								LEFT EAR							
	0-15dB	16-29dB	30-44dB	45-59dB	60-79dB	80dB & over	0-15dB	16-29dB	30-44dB	45-59dB	60-79dB	80dB & over				

## D. EXAMINER IDENTIFICATION

Name of clinic or place conducting audiological examination

Date \_\_\_\_\_

Address \_\_\_\_\_ (Number and Street) \_\_\_\_\_ (City) \_\_\_\_\_ (State &amp; ZIP Code) \_\_\_\_\_

Profession of Examiner:  Audiologist  Otologist  Other M.D.  Audiometrist  Nurse  Teacher

Other (specify) \_\_\_\_\_

**VI. INTELLIGENCE TEST**

Indicate results of most recent intelligence test

Name	Level	I.Q. Scores	
		Verbal	Nonverbal
			Date Tested _____ (Month, Yr.) _____

**VII. ADDITIONAL HANDICAPPING CONDITIONS**Check all educationally significant handicapping conditions: If none, check here 

<input type="checkbox"/> Epilepsy	<input type="checkbox"/> Severe Visual	<input type="checkbox"/> Emotional Problems	<input type="checkbox"/> Perceptual-Motor Disorders
<input type="checkbox"/> Cleft Lip or Palate	<input type="checkbox"/> Mental Retardation	<input type="checkbox"/> Behavioral Problems	<input type="checkbox"/> Cerebral Palsy
<input type="checkbox"/> Other (describe) _____			

**VIII. HEARING AID USE**A. Does Student Use a Personal Aid?  Yes  No  
If YES, is aid:  Monaural  Binaural  Y Cord

B. Speech Awareness Threshold With Aid is \_\_\_\_\_ dB.

C. Speech Reception Threshold With Aid is \_\_\_\_\_ dB.

**COMMENTS:**

## APPENDIX IV

# Participants in the Annual Survey of Hearing Impaired Children and Youth

### ALABAMA

Alabama Institute for the Deaf & Blind  
\*Bessemer City Schools  
Birmingham Public Schools  
\*Blossomwood Elementary School  
\*Children's Center of Montgomery, Inc.  
\*Etowah County Board of Education  
\*Franklin County Board of Education  
\*Holt Elementary School  
\*Huntsville Rehabilitation Center  
\*Lewis-Slossfield Speech & Hearing Center  
\*Mobile County Deaf Education Program  
\*Mobile Preschool for the Deaf, Inc.  
\*Tuscaloosa County Schools  
\*University of Montevallo Speech & Hearing Clinic

### ALASKA

\*Alaska Treatment Center for Crippled Children & Adults, Inc.  
Anchorage Borough School District  
\*Bethel State School

### ARIZONA

Arizona State School for the Deaf & Blind  
\*Emerson School  
Samuel Gompers Memorial Rehabilitation Center, Inc.  
\*Phoenix Day School for the Deaf  
Phoenix Elementary Oral Day Classes

### ARKANSAS

Arkansas Speech & Hearing Center  
Jenkins Memorial Children's Center

### CALIFORNIA

Alhambra City School District  
Alum Rock Union Elementary School District  
Anaheim Union High School District  
\*Aurally Handicapped Classes of Solano County  
Bellflower Unified School District  
Mary E. Bennett School for the Deaf  
Butte County Schools

\*California School for the Blind, Deaf-Blind Department  
California School for the Deaf, Berkeley  
California School for the Deaf, Riverside  
Cedarcreek School for the Deaf  
Centinela Valley Union High School District  
Centralia School District  
Ceres Unified School District  
\*Chula Vista City School District  
Covina Valley Unified School District  
Cutler-Orosi Unified School District  
\*Downey Senior High School  
\*East San Gabriel Valley School for Multi-Handicapped Children  
Escondido Union School District  
Fremont Unified School District — Blacow Elementary  
Fresno City Unified School District  
\*Garden Grove Unified School District  
Goleta Union Elementary School District  
Hayward City Unified School District  
Chris Jespersen School  
Kern County Schools  
\*La Mesa — Spring Valley School District  
Lancaster Elementary School District  
\*Language, Hearing, & Speech Clinic, Fresno State College  
Little Lake City Elementary School District  
Livermore Valley Joint Unified School District  
Lompoc Unified School District  
Long Beach Unified School District  
Marin County Schools  
Marlton Elementary School  
Montebello Unified School District  
Monterey County Schools  
Mt. Diablo Therapy Center  
Mt. Diablo Unified School District  
Napa Valley Unified School District  
Norwalk-La Mirada Unified School District  
Oakland City Unified School District  
Orange Unified School District  
\*Orcutt Union Elementary School District

\*Programs that joined the Survey during the 1970-71 school year. The other programs participated in the Survey during the 1969-70 school year.

\*Pajaro Valley Unified School District  
\*Palo Alto Unified School District  
Pasadena City Unified School District  
\*Placer County Public Schools  
Pomona Unified School District  
Redondo Beach City Elementary School District  
Richmond Unified School District  
Riverside Unified School District  
Sacramento City Unified School District  
\*San Bernardino County Schools  
San Diego Unified School District  
San Francisco Speech & Hearing Center  
San Jose City Unified School District  
San Juan Unified School District  
San Mateo County Classes for the Deaf  
San Mateo Union High School District  
Santa Ana Unified School District  
Santa Clara Unified School District  
\*Santa Cruz County Itinerant Program for the  
Hearing Impaired  
Santa Rosa City School District  
Shasta County Schools  
Simi Valley Unified School District  
\*South Junior High School  
Southwest School for the Deaf  
Stockton Unified School District  
Sunnyvale Elementary School District  
Sutter County Schools – Lincrest School  
\*Tehama County Public Schools  
Tulare County Schools  
Tulare Union High School District  
Union Elementary School District  
Ventura Unified School District

#### COLORADO

\*Aurora Public Schools  
Children's Hospital, Denver  
Colorado School for the Deaf & Blind  
\*Colorado Speech & Hearing Center, Denver  
Colorado State College – Bishop Lehr Laboratory  
Jefferson County Public Schools R-1  
\*John Evans School  
\*Meadow Elementary School  
Pleasant View Elementary School  
Poudre R-1 Services for Aurally Handicapped Children

#### CONNECTICUT

\*American School for the Deaf  
Capitol Region Education Council – Hearing  
Impaired Class

Class for Preschool Hearing Impaired Children,  
Hartford  
Easter Seal Goodwill Industries Rehabilitation  
Center  
\*East Hartford Public Schools  
Enfield Public Schools – Preschool Hearing  
Impaired Class  
Fairfield Public Schools – Preschool Hearing  
Impaired Class  
Green Acres School  
Hamden-New Haven Cooperative Educational  
Center  
\*Kings Highway School  
Magrath School  
Monroe Preschool Hearing Impaired Program  
Mystic Oral School for the Deaf  
Reynolds Preschool Hearing Impaired Program  
South School  
West Haven Department of Special Education

#### DELAWARE

Margaret S. Sterck School for Hearing Impaired

#### DISTRICT OF COLUMBIA

\*Capitol Region Model Secondary School for the  
Deaf  
Department of Special Education  
Kendall School for the Deaf  
Speech and Hearing Center – Public Schools of  
the District of Columbia

#### FLORIDA

\*Allie Yniestra School  
Brevard County Public Schools  
Dade County Day Classes for Deaf  
\*Easter Seal Rehabilitation Center, Fort  
Lauderdale  
\*Edge Elementary School  
Florida School for the Deaf & Blind  
Hillsborough County Public Schools  
\*Holly Hill Elementary School  
\*Jackson Memorial Hospital, Audiology –  
Speech Pathology  
\*Lee County Department of Special Education  
\*Leon County Program for Hearing Impaired  
Children  
Robert McCord Oral School  
Palm Beach County School  
\*Pinellas County Schools  
Rock Lake Elementary School

\*Programs that joined the Survey during the 1970-71 school year. The other programs participated in the Survey during the 1969-70 school year.

\*Speech and Hearing Center, Inc., Jacksonville  
\*Tampa Oral School for the Deaf

#### GEORGIA

\*Atlanta Public Schools  
Atlanta Speech School, Inc.  
Cobb County Board of Education  
The Davison School, Inc.  
Lawton B. Evans School  
Georgia School for the Deaf  
\*Houston Speech & Hearing School  
Savannah Speech & Hearing Center  
\*Robert Shaw Center

#### HAWAII

Central Intermediate School  
Diamond Head School for the Deaf  
McKinley High School

#### IDAHO

Idaho School for the Deaf & Blind  
Speech & Hearing Center — Idaho State  
University

#### ILLINOIS

Bartonville Grade School Deaf Program  
Bell Elementary School  
Bi-County Oral Deaf Program  
Black Hawk Hearing Handicapped Program  
Champaign Community Schools  
Chicago Vocational High School  
Decatur Public School District  
Dixon State School  
Elim Christian School for the Exceptional Child  
Ericson School  
\*Nathaniel Greene School  
\*Harrison High School  
Dr. Robert Henner Hearing & Speech Center  
Illinois School for the Deaf  
\*The Institute for Hearing & Speech  
Jamieson School  
Maine Township Special Education Program  
Marquette Elementary School  
Thomas Metcalf School  
\*Morrill Elementary School  
Niles Township Department of Special Education  
\*Northern Suburban Special Education District  
Northwestern Illinois Association  
Northwest Suburban Special Education  
Organization

Perry School  
\*Quincy Public Schools  
Ray School  
Reinberg School  
\*St. Joseph's Speech & Hearing Clinic  
Scammon School  
\*Shields Elementary School  
South Metropolitan Association for Low-  
Incidence Handicapped  
Special Education District of Lake County  
\*Springfield Public Schools  
Tazewell-Mason Counties Special Education  
Association  
\*James Ward Elementary School  
West Suburban Association for the Hearing  
Handicapped  
\*Williamson County Special Education District

#### INDIANA

Ball State University  
Central Avenue School  
Deaf-Oral Nursery of the Rehabilitation Center,  
Evansville  
East Chicago Day Class for the Deaf  
\*Floyd County Preschool Deaf Class  
Glenwood Elementary School  
\*Hammond Public Schools  
\*Hearing & Speech Center of St. Joseph's County,  
Inc.  
Indiana School for the Deaf  
Indiana University Medical Center  
Marion Community Schools  
\*Michigan City Area Schools  
\*Morrison-Mock School  
Oral Deaf Classes & Hearing Conservation  
Program, South Bend  
\*Trade Winds Rehabilitation Center, Inc.

#### IOWA

Black Hawk-Buchanan County Board of  
Education  
Cedar Rapids Community School  
\*Dubuque County Schools  
Hope Haven School  
Iowa School for the Deaf  
Ottumwa Community School District  
Smouse Opportunity School  
Wilson School — Oral Deaf Department

\*Programs that joined the Survey during the 1970-71 school year. The other programs participated in the Survey during the 1969-70 school year.

## KANSAS

Hays Regional Classroom for the Hard-of-Hearing  
\*Hoisington Unified School District #431  
Institute of Logopedics, Inc.  
Kansas School for the Deaf  
Lawrence Unified School District 497 —  
Grant School  
\*Salina Public Schools  
\*Speech & Hearing Clinic, Kansas State University  
\*Topeka Public Schools  
\*Mark Twain Elementary School  
University of Kansas Medical Center  
Wichita Public Schools

## KENTUCKY

Kentucky School for the Deaf  
Knox Central High School  
Lexington Deaf Oral School  
Louisville Deaf Oral Institute  
Louisville Public Schools  
\*West Kentucky Easter Seal Center for Crippled  
Children & Adults

## LOUISIANA

Acadia Parish School Board  
Delgado College  
Jefferson Parish School Board  
Lafayette Parish School Board  
Louisiana School for the Deaf  
Speech & Hearing Center of Southwest  
Louisiana, Inc.  
State School for the Deaf — Southern Branch  
Sunset Acres School

## MAINE

Bangor Regional Speech & Hearing Center  
Governor Baxter State School for the Deaf  
Northeast Hearing & Speech Center, Inc.  
Pine Tree Society

## MARYLAND

William S. Baer School #301  
Baltimore County Department of Special  
Education  
\*Board of Education of Harford County  
Forest Park Senior High School  
Gateway Preschool  
Maryland School for the Deaf  
Montgomery County Public Schools  
\*Pikesville Junior High School

\*Programs that joined the Survey during the 1970-71 school year. The other programs participated in the Survey during the 1969-70 school year.

\*Prince George's County Public Schools  
\*Special Education Center, Hagerstown

## MASSACHUSETTS

\*Belmont Public Schools  
Beverly School for the Deaf  
Boston School for the Deaf  
Peter Bulkeley School  
Clarke School for the Deaf  
\*Communications Disorders Department, Franklin  
County Public Hospital  
Day Class for Preschool Deaf, Lowell  
Sarah Fuller Foundation  
Habilitation Center for the Pre-School Hard-of-  
Hearing & Deaf Children, Canton  
Haverhill Preschool Class for Deaf  
\*Horatio A. Kempton School  
\*Lawrence Primary Program for the Deaf  
\*Leominster Day Classes for the Hearing Impaired  
\*Horace Mann School for the Deaf  
Mercer School  
Myrtle Street School  
Page School  
Perkins School for Blind  
\*Reading Day Class for Deaf  
\*Willie Ross School for the Deaf  
Thayer-Lindsley Parent Centered Nursery  
Upsala Street School  
Waltham Public Schools  
Woburn Day Class Program  
\*Worcester County Hearing & Speech Center

## MICHIGAN

\*Allen Park Public Schools  
\*Brighton Public Schools  
Howard D. Crull Intermediate School  
\*Delta-Schoolcraft Intermediate School District  
Detroit Day School for Deaf  
Douglas School  
Durant-Tuuri-Mott School  
\*Eastern Michigan University Speech & Hearing  
Clinic  
Handley School  
Ida Public Schools  
Thomas Jefferson School  
\*Kalamazoo Public Schools  
Anur J. Kellogg School  
\*Lakeview Elementary School, Negaunee  
Lakeview Public Schools  
Lansing Public Schools

Lapeer State Home & Training School  
John A. Lemmer School  
Lutheran School for the Deaf  
Marquette Elementary  
\*Michigan School for the Deaf  
Michigan School for the Blind  
\*Michigan State University Speech & Hearing  
Clinic  
Mott Foundation Children's Health Center  
Oakland Schools  
Preschool Physically Handicapped Program,  
Wyoming  
Public School Program for Deaf & Hard-of-  
Hearing, Jackson  
Redford Union Hard-of-Hearing Program  
Riverside Elementary School  
Shawnee Park Schools  
\*Speech Clinic of the University of Michigan  
Medical School  
Tecumseh Public Schools  
Traverse City Public Schools  
Tri-County Preschool  
Utica Schools  
Warren Consolidated Schools  
\*Wayne Community School District

#### MINNESOTA

\*Anoka-Hennepin School District #11  
\*Austin Public Schools  
Duluth Public Schools  
Lutheran High School  
Minneapolis Public Schools  
Minnesota School for the Deaf  
St. Paul Area Program for Impaired Hearing  
Technical Vocational Institute

#### MISSISSIPPI

\*Mississippi School for the Deaf  
\*Tupelo Regional Rehabilitation Center

#### MISSOURI

\*Central Institute for the Deaf  
Delaware Elementary School  
\*Gallaudet School for the Deaf  
Hearing & Speech Center, Kansas City  
Humboldt School  
Missouri School for the Deaf  
\*Neosho Public Schools  
\*North Kansas City Public Schools

St. Louis County Special School District for the  
Handicapped — Litzsinger School  
St. Louis University Speech & Hearing Clinic  
School District of Kansas City

#### MONTANA

Montana State School for the Deaf & Blind  
University of Montana Speech & Hearing Clinic

#### NEBRASKA

Nebraska School for the Deaf  
Omaha Hearing School for Children, Inc.  
\*Omaha Public Schools  
Prescott Acoustically Handicapped Unit

#### NEVADA

Ruby Thomas Elementary School  
\*Washoe County School District

#### NEW HAMPSHIRE

Crotched Mountain School for the Deaf  
\*Easter Seal Rehabilitation Center of Greater  
Manchester  
Portsmouth Rehabilitation Center

#### NEW JERSEY

\*American Institute for Mental Studies  
Avon School  
Bruce Street School  
Class for the Hard-of-Hearing, Kearny  
Clifton Public Schools  
\*Cumberland County Public Schools  
Douglas Nursery for Hearing Handicapped  
Hackensack Program for the Deaf  
Helmbold Education Center  
Hunterdon Medical Center Nursery for Hearing  
Impaired Children  
\*Marie H. Katzenbach School for the Deaf  
\*The Midland School  
Millburn Avenue School  
Newark State College  
\*North Jersey Training School  
\*Speech & Hearing Center, Burlington County  
Memorial Hospital  
Summit Speech School  
Township Public Schools, Neptune  
Woodbridge Public School System

\*Programs that joined the Survey during the 1970-71 school year. The other programs participated in the Survey during the 1969-70 school year.

## NEW MEXICO

\*Albuquerque Hearing & Speech Center  
New Mexico School for the Deaf

## NEW YORK

Albany Medical Center Hospital  
Board of Cooperative Educational Services,  
Nassau  
\*Board of Cooperative Educational Services,  
Suffolk County II  
\*Board of Cooperative Educational Services,  
Suffolk County III  
\*Board of Cooperative Educational Services of  
Washington, Warren, & Hamilton Counties  
\*Buffalo Public Schools  
Catholic Charities Day Classes for Deaf Children  
Cerebral Palsy Preschool  
Children's Hospital & Rehabilitation Center  
\*Demonstration Home Program, Rochester  
\*Dutchess County Board of Cooperative  
Educational Services  
\*Erie County Board of Cooperative Educational  
Services  
Grasslands Hospital  
\*Alexander Hamilton School #31  
\*Hebrew Institute for the Deaf  
Junior High 47-M School for Deaf  
\*Meadowbrook Hospital Speech & Hearing Clinic  
\*Mill Neck Manor Lutheran School for the Deaf  
New York Institute for the Education of the Blind  
New York School for the Deaf, White Plains  
New York State School for the Deaf, Rome  
\*Queens College Speech & Hearing Center  
\*Rensselaer County Board of Cooperative Edu-  
tional Services  
Rochester School for the Deaf  
\*St. Francis de Sales School for the Deaf  
St. Joseph's School for the Deaf  
St. Mary's School for the Deaf  
School for Language & Hearing Impaired  
Children - Public School 158  
Suffolk School for Deaf Children  
Union-Endicott Central School District

## NORTH CAROLINA

Charlotte Speech & Hearing Center, Inc.  
Duke University Medical Center  
Eastern North Carolina School for the Deaf  
\*Mecklenburg School - Department of Special  
Education

\*Programs that joined the Survey during the 1970-71 school year. The other programs participated in the Survey during the 1969-70 school year.

The Governor Morehead School  
North Carolina School for the Deaf  
Path School, Inc.

\*Wake County Preschool for the Hearing Impaired

## NORTH DAKOTA

Longfellow School  
\*Minot State College Speech & Hearing Clinic  
North Dakota School for the Deaf  
University of North Dakota Speech & Hearing  
Clinic

## OHIO

Akron Board of Education  
\*Alexander Graham Bell School, Columbus  
Alexander Graham Bell School for the Deaf,  
Cleveland  
Betty Jane Oral School  
Canton Public Schools  
Cincinnati Educational Center  
\*Clark County Hearing & Speech Center  
\*Cleveland Heights High School  
\*Elyria City Schools  
Hearing & Speech Center of Columbus and  
Central Ohio  
\*Howard Day School for the Hearing Impaired  
\*L.B. Kean Elementary School  
Kennedy School for the Deaf  
Kent Public Schools  
Kent State University  
Litchfield Rehabilitation Center  
\*McKinley Elementary School  
Mansfield City Schools  
Millridge Center for Hearing Impaired  
Ohio School for the Deaf  
Program for Physically Handicapped, Toledo  
\*St. Rita's School for the Deaf  
\*Springfield City Schools  
Trumbull County Hearing Society  
Warren City Schools  
\*Youngstown Public Schools  
Zanesville Classes for Deaf

## OKLAHOMA

Community Speech & Hearing Center, Enid  
Eastside School  
The Junior League Program for Children with  
Hearing Losses  
\*Kerr Junior High School

Oklahoma City Public Schools  
\*Oklahoma School for the Deaf  
University of Oklahoma Medical Center  
\*Washington School

#### OREGON

Hearing and Speech Center, Eugene  
Oregon State School for the Deaf  
Portland Center for Hearing & Speech, Inc.  
Portland Public Schools  
Tucker-Maxon Oral School  
\*Washington County Intermediate Education  
District

#### PENNSYLVANIA

Archbishop Ryan Memorial Institute for the Deaf  
De Paul Institute  
\*Ebensburg State School and Hospital  
\*Elwyn Institute  
Erie City School District  
\*Home of the Merciful Saviour for Crippled Children  
Willis and Elizabeth Martin School  
\*Pennhurst State School and Hospital  
Pennsylvania School for the Deaf  
Pennsylvania State Oral School for the Deaf  
\*The Pittsburgh Hearing & Speech Society, Inc.  
Western Pennsylvania School for the Deaf  
Programs for Speech & Hearing Handicapped:  
Adams County Schools  
Allegheny County Schools  
Armstrong County Schools  
Beaver County Schools  
Bedford County Schools  
Berks County Schools  
Blair County Schools  
Bradford County Schools  
Bucks County Schools  
Butler County Schools  
Cambria County Schools  
Cameron County Schools  
Carbon County Schools  
Centre County Schools  
Chester County Schools  
Clarion County Schools  
Clinton County Schools  
Crawford County Schools  
Cumberland County Schools  
Dauphin County Schools  
Delaware County Schools  
Elk County Schools

Erie County Schools  
Fayette County Schools  
Franklin County Schools  
Fulton County Schools  
Greene County Schools  
Huntingdon County Schools  
Indiana County Schools  
Juniata County Schools  
Lackawanna County Schools  
Lancaster County Schools  
Lawrence County Schools  
Lebanon County Schools  
Luzerne County Schools  
Lycoming County Schools  
McKean County Schools  
Mercer County Schools  
Mifflin County Schools  
Monroe County Schools  
Montgomery County Schools  
Montour County Schools  
Northampton County Schools  
Northumberland County Schools  
Perry County Schools  
Pike County Schools  
Potter County Schools  
Schuylkill County Schools  
Snyder County Schools  
Somerset County Schools  
Sullivan County Schools  
Susquehanna County Schools  
Tioga County Schools  
Venango County Schools  
Warren County Schools  
Washington County Schools  
Westmoreland County Schools  
York County Schools

#### RHODE ISLAND

\*Preschool Language Class at Meeting Street School  
\*Rhode Island Hospital Hearing & Speech Center  
Rhode Island School for the Deaf  
\*Windmill Hearing Therapy Program

#### SOUTH CAROLINA

Charleston County Schools  
\*Estes Elementary School  
Florence County School District #3  
\*Hearing and Speech Center, Columbia  
\*Keowee Schools

\*Programs that joined the Survey during the 1970-71 school year. The other programs participated in the Survey during the 1969-70 school year.

\*Parker House Education Center for Hearing  
Handicapped Children  
Pate Elementary School  
\*Pee Dee Hearing & Speech Center  
\*Spartanburg Speech & Hearing Clinic  
South Carolina School for the Deaf & Blind  
United Speech & Hearing Services

#### **SOUTH DAKOTA**

South Dakota School for the Deaf

#### **TENNESSEE**

\*Arlington State Hospital & School  
\*Clover Bottom Hospital & School  
East Tennessee State University — Speech  
& Hearing Clinic  
\*Green Valley Hospital & School  
Hamilton County Speech & Hearing Center  
\*Knox County Public Schools  
Memphis City Schools  
Memphis Parents' School for Deaf & Aphasic  
Memphis Speech & Hearing Center  
Metropolitan Schools of Nashville & Davidson  
County  
Sunnyside School  
Tennessee School for the Deaf  
University of Tennessee — Preschool Deaf  
Program  
Bill Wilkerson Hearing & Speech Center

#### **TEXAS**

\*Abilene Public Schools — Day Class for the Deaf  
Amarillo Regional Hearing & Speech Center  
Austin Independent School District  
Baylor Speech & Hearing Clinic  
\*Bi-County Deaf & Hard of Hearing School,  
Brownsville  
\*Bexar County School for the Deaf  
P.F. Brown Elementary School  
The Callier Hearing & Speech Center  
Corpus Christi Independent School District  
County-Wide Area Day School, El Paso  
Dallas Independent School District  
Dallas Society for Crippled Children  
\*Easter Seal Society for Crippled Children &  
Adults of Tarrant County, Inc.  
\*Farias Special Education School  
Grayson County Crippled Children & Adult  
Center  
\*Harlandale Independent School District

Houston Independent School District  
Houston School for Deaf Children  
\*Houston Speech & Hearing Center  
Helen Keller Special Education School  
\*Midland Independent School District  
Multi-County School for the Deaf  
Pasadena Independent School District  
\*Port Arthur Independent School District  
\*Sunshine Cottage School for Deaf Children  
Tarrant County Day School for Deaf  
\*Temple Memorial Treatment Center  
Texas Christian University Speech & Hearing  
Clinic  
Texas School for the Deaf  
Waco Independent School District  
Wichita Falls Independent School District

#### **UTAH**

Brigham Young University — Communicative  
Disorders Clinic  
Utah Schools for the Deaf & Blind  
Utah State University — Edith Bowen  
Laboratory School

#### **VERMONT**

Austine School for the Deaf

#### **VIRGINIA**

Arlington County Public Schools  
Blue Ridge Speech & Hearing Center, Inc.  
\*Bristol Memorial Hospital Speech & Hearing  
Center  
\*Charlottesville Public Schools  
\*Chesterfield County Public Schools  
Diagnostic, Adjustive & Corrective Center for  
Learning  
Diagnostic Special Education School of Tidewater  
Rehabilitation Institute  
St. Paul's Oral School  
Virginia School for the Deaf & Blind  
Virginia State School for the Deaf at Hampton

#### **WASHINGTON**

Bellingham School District #501  
\*Bellevue Public Schools  
Bremerton School District 100-C  
\*Edmonds School District #15  
Edna E. Davis School  
\*Kent Public Schools  
\*Northshore School District #417

\*Programs that joined the Survey during the 1970-71 school year. The other programs participated in the Survey during the 1969-70 school year.

\*Seattle Community College, Classes for the Deaf  
Seattle Public Schools  
\*Shoreline School District #412  
University of Washington – Experimental  
Education Unit  
Washington State School for Blind  
Washington State School for the Deaf  
\*Washington State University Speech & Hearing  
Clinic  
Yakima School District #7

#### WEST VIRGINIA

\*Kanawha Hearing & Speech Center  
West Virginia School for the Deaf & the Blind

#### WISCONSIN

Bartlett School

Berryville School  
City District Public Schools, La Crosse  
Cooper Day School for Deaf  
Day School for Deaf, Wausau  
Madison Public Schools  
Milwaukee Hearing Society, Inc.  
\*Oshkosh Program for Hearing Impaired Children  
\*Pleasant Hill School  
\*St. John's School for the Deaf  
School for the Deaf, Green Bay  
E.H. Wadewitz School  
\*Washington School, Sheboygan  
Wisconsin School for the Deaf

#### WYOMING

Wyoming School for the Deaf

\*Programs that joined the Survey during the 1970-71 school year. The other programs participated in the Survey during the 1969-70 school year.

**REPORTS FROM THE ANNUAL SURVEY OF  
HEARING IMPAIRED CHILDREN AND YOUTH**

**SERIES D**

- No. 1 Academic Achievement Test Performance of Hearing Impaired Students—United States: Spring 1969
- No. 2 Item Analysis of Academic Achievement Tests Hearing Impaired Students—United States: Spring 1969
- No. 3 Additional Handicapping Conditions, Age at Onset of Hearing Loss, and Other Characteristics of Hearing Impaired Students—United States: 1968-69
- No. 4 Type and Size of Educational Programs Attended By Hearing Impaired Students—United States: 1968-69
- No. 5 Summary of Selected Characteristics of Hearing Impaired Students — United States: 1969-70